

THE

# BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LXXV.

THURSDAY, DECEMBER 6, 1866.

No. 19.

## ON THE PRACTICAL USES OF THE LARYNGOSCOPE AND RHINOSCOPE IN DIAGNOSIS.

By EPHRAIM CUTTER, M.D., BOSTON.

[Read before the Maine State Medical Society at Portland, June, 1866, and communicated for the Boston Medical and Surgical Journal.—Continued from vol. lxxiv., page 201.]

**RHINOSCOPY.**—*Terminology.*—As its origin implies, the word signifies a viewing of the nose. It embraces outside and inside inspection. In the outside observation is included the general appearance, the outlines, the prominences, flatness, thickness, angles, symmetry, length, and the condition of the integuments of the nose; the size, shape, dimensions and plane of the nostrils. This form of rhinoscopy is general among mankind, as none of the features of the human countenance is more marked, noticeable and noticed than the organ in question. The inside observation is naturally divided into two departments—(1) the observation of the cavities of the nose through the nostrils, and (2) through the posterior nares. The divisions may be termed anterior inspection and posterior inspection.

*Anterior inspection* is easily performed and important. It is practised on the patient by bringing the face directly into a strong illumination—either of direct or reflected sunlight, diffused daylight, or direct and reflected artificial light. The examination may be conducted either in the sitting or standing posture. The subject's head should be thrown backward and the light allowed to enter. In case of a partial stenosis, the nostrils may be dilated with spring wire forceps, blunt probes, straight or crooked, or with a dilator having three prongs. Physical lesions may thus be detected which are unsuspected and surprising. For instance—

**CASE XVI.**—A boy, 12 years of age, of cachectic habit, during convalescence from a month's sickness of what appeared at the time to be an acute rheumatic inflammation involving the left hip-joint (but which was afterwards proved an exostosis of the femur, not involving the head), was observed to be continually picking his nose with his fingers, frequently with the result of besmearing the nostrils, upper lip and fingers with blood. Anterior rhinoscopic examination revealed a complete circular perforation of the cartilage of the vomer about five eighths of an inch in diameter. The light sent into one nostril

VOL. LXXV.—No. 19

illuminated the other through the abnormal foramen. The ulcerated surface of the vomer presented a re-entering angle, and was granulated and bloody.

*Posterior inspection* of the nose is what is now considered the especial province of rhinoscopy. It signifies the viewing of the parts contained in the anatomical wedge-shaped space situated back of the mouth, and bounded as follows: the base is an imaginary curved plane, with convexity upwards, reaching from the free surface of the soft palate, when hanging in passivity, to the post-pharyngeal wall. Backwards the space is bounded by the perpendicular posterior wall of the pharynx, which extends upwards to the basilar process of the occipital bone, and meets at a sort of gothic angle the anterior boundary plane, which reaches downwards and forwards to the free edge of the soft palate. This anterior boundary is not a straight plane like the posterior boundary, but elliptically concave—the concavity presenting backwards. The anterior boundary is perforated by four foramina—namely, the two openings of the posterior nares and the internal orifices of the two Eustachian tubes. The lateral walls of this space are triangular, convex outwards, and accurately coalescing with the anterior and posterior boundary. They are covered with mucous membrane and supplied with the usual muciparous glands, and in other respects they are like the posterior boundary. It is the peculiar province of rhinoscopy by special contrivances to demonstrate the above-described space to the eye of an observer. It is proposed here to give a physiological diagnosis of these parts, based solely upon auto-rhinoscopic examinations which have been repeatedly conducted during the space of several years. What is said is true only of my own person, and is derived from actual inspection by myself. The measurements have been taken by the eye, which has immediately before admeasurement contemplated the graduated tape-line. They have been confirmed by observations made with a graduated mirror. The description of this part of my body must not be taken as the exact description of the same part in others, any more than an exact description of one man's face would accurately tally with that of others. Still, as human faces have a correspondence in their general features, so it may be expected that the interior nares may share in similarity. Experience shows this to be true in general.

The parts described are:—

1. The posterior boundary.
2. The anterior boundary, including
  - (a.) The dome and Rosenmüller's fossæ.
  - (b.) The two posterior nares.
  - (c.) The turbinated bones.
  - (d.) The vomer.
  - (e.) The two orifices of the Eustachian tube.
  - (f.) The posterior surface of the uvula and soft palate.

1. The posterior boundary is simply an upward continuation of the post-pharyngeal wall. It appears as a plane surface, composed of the bodies of the vertebræ, covered with investments of fascia and mucous membrane, of the same physical characters with that portion which covers the wall which is in sight at the back part of the mouth. Judged of by the eye, in my own throat it is about two and a half to three inches in its greatest length, and two inches in its greatest breadth. It is amply provided with muciparous follicles. In a state of health, the mucous membrane is smooth and of a pale red. It is very liable to disease, such as denudation of the mucous membrane, ulceration, herpes, secretion of masses of mucus, varying from a thick, tough, inspissated character to that of a thin, glairy description, which often causes a very troublesome sensation, described by patients as a "dropping from the nose," and deemed a "catarrh," while in fact it has nothing to do with that disease, being entirely independent of the nares, and amenable to treatment which has nothing to do with the nostrils. There is a want of symmetry in my case, the one on the right being larger than that on the left. The posterior boundary bends a little forward at its upper part to unite with (2) the anterior boundary to form (*a*) the dome. This dome lies underneath the basilar process of the occipital bone. It is not a segment of a sphere or ellipse, but rather a very acute, irregular gothic arch. In health it is covered with ordinary looking mucous membrane, supplied with follicular glands. The extreme corners of the dome are termed Rosenmuller's fossæ. The dome and Rosenmuller's fossæ are sometimes the seat of abnormal excretions. The anterior boundary descends about five eighths of an inch, when it is perforated by what are the chief objects of interest in this region, namely, (*b*) the two posterior openings of the nares. These are two elliptical foramina, with the major axis vertical, of the following dimensions in my own case: major axis, three fourths of an inch; minor axis, one fourth of an inch. The accompanying cut is a tolerably accurate diagram of the anterior boundary as it appears in the rhinoscope in my own case. It shows the posterior surface of the uvula, the vomer, the Eustachian orifices, the posterior nares, the turbinated bones, only in the impression the parts are reversed from left to right.



They are separated by the vomer, which will hereafter be described. These openings present directly backwards, and contain three bodies, which are, being properly visible, posterior terminations of (*c*) the superior, middle and inferior turbinated bones. These appear like irregularly spherical, club-shaped or fist-like bodies, attached to the parietes of the nares as follows. The superior,

as is the case in the dried anatomical skull, is rather vague and indefinite. It is the smallest. It presents the appearance of an obscure hemispherical swelling, situated at the upper and inner part of the nasal opening, and seems as if attached to the vomer. The two are not symmetrical in size, the one on the left being larger than that upon the right. Oftentimes they are absent. The *middle turbinate* bone is next larger in size. It appears as if attached to the middle of the outer wall of each opening of the nares. It is something more than hemispherical—perhaps three quarters of a sphere. It projects directly inwards, approximating its fellow and the vomer. There is more space above than below it. This bone is usually present. It often varies its shape from that indicated to a long, thin process, incurved in a direction parallel to the inner corresponding margin of the opening in which it is placed. In such cases it is usually clubbed at the extremity. The *inferior turbinate bone* appears larger in bulk than both its other companions. It is seated at the outer half of the floor and the lower part of the outer parietes of each nasal opening. Its bulges out from its seat into an irregular globular form, nearly filling up the lower half of the opening of the nares. A probe run through what was apparently the inferior passage of the nose, appeared to come out above the inferior turbinate bone. The color of the mucous membrane covering the three turbinated bones is not always the same, so it is difficult to say what is the normal hue. It varies with the time of the day and the season of the year. It is not constant for a long time.

CASE XVII.—Physiological experiment on the author, showing the effect on the color of the mucous membrane of the turbinated bones produced by the insufflation of an aroma, observed by Dr. L. Elsberg, of New York:—Color of the mucous membrane of the turbinated bones, a pale whitish. Upon inhaling, chiefly through the right nostril, a pleasant aroma of a volatile character for about one minute, Dr. Elsberg noticed a deep color of a purplish character involving chiefly the mucous membrane of the turbinated bones of the right side. This experiment only confirms my own previous examination.

The following colors have been observed:—an ashy-white, a pale diaphanous white, and purplish hues like those seen upon the injected or uninjected wattles of the turkey cock.

From observation, I am inclined to think that a pale whitish is the normal color. The darker colors seen are due to injection of the bloodvessels of the very vascular erectile tissue, caused by the irritation of cold air, noxious or other vapors, &c.

It would seem as if there were a large amount of erectile tissue distributed in the substance covering the turbinated bones. This is evinced by the swelling as well as by the change of color. They are probably also the chief agents in the absorption of the vicious elements in noxious atmospheric vapors.



The color of the mucous membrane lining the interior of the nasal passages is of a more uniform tint than that of the mucous membrane of the turbinated bones. It varies from a pale red to a purplish red; sometimes injected bloodvessels and their branches are distinctly seen ramifying upon the surface. I have not observed them on the mucous membrane of the turbinated bones. This is very easily tried in the simple experiment of inhaling through the nostril the smoke produced by the primary ignition of a common sulphur match, then breathing in by the open mouth the same hyper-sulphurous vapor.

CASE XVIII. *Physiological Experiment.*—1866, May 8th, 1½, P.M. Auto-rhinocopy by sunlight reflected into the house from without. Observation conducted in the house.

Mucous membrane covering the turbinated bones, ashy white. Inhaled through both nostrils the hypersulphurous vapor resulting from the primary ignition of a common sulphur match. The first effect on the color was to make it more white, which whiteness lasted for a few minutes. The next effect was to produce a purplish hue, not so deep as has been observed on cold mornings in winter. There was attendant with the purple hue a secretion from the mucous membrane, with a strong disposition to sneeze. The mucous membrane of the walls of the nasal passages was not observed to be materially changed in physical appearance. Very little if any of the hyper-sulphurous vapor passed into the lungs or windpipe, as was the case when inhaled through the mouth. This experiment seems to confirm Catlin's argument in favor of the great benefit derived from breathing through the nose, which he alleges has a straining and chemically purifying effect on inspired atmospheric vapors.

*The Vomer.*—The posterior part of this bone appears as an upright lamina of bone in the median line, forming the boundary line and division between the two nares. It does not show as sometimes it does in the prepared skull, like a lamina of uniform thickness, but as a septum, straight, narrow and white on its free edge, gradually expanding to a considerable thickness as it disappears in front. Its free surface is probably a membranous extension between the two bony processes, terminating in the dried skull the superior and inferior posterior boundaries of the vomer. Its upper part is regularly expanded, like the bole of an exogenous tree, symmetrically extending to either side, forming the inner boundary of the nasal opening. The lower extremity is similarly expanded, so that the shape of the free back edges of the vomer *in situ naturali*, and clothed with its normal investments, is something like a well-formed hour-glass-shaped support, large at top and bottom and small between. Its sides, at the upper part, are also expanded into what passes for the superior turbinated bone. The mucous membrane that covers the vomer is of a cartilaginous white on the free, sharp posterior surface, and passes into a pale red color.

*The Internal Orifices of the Eustachian Tubes.*—These orifices are not bony, as it would seem from their look in my case, but are composed of mucous membrane, with fibrous tissue. These are about one fourth of an inch in vertical diameter, and about three sixteenths in longest transverse diameter. They are irregularly triangular-shaped orifices, with rounded edges incurved. The base of the triangle is above. The inner side is parallel with the outer margin of the nasal openings. They are situated adjacent to the upper and outer quarters of the nasal openings. They are usually open, but are easily and always closed by the elevation of the soft palate upwards and backwards to approximate the post-pharyngeal wall—as occurs in the act of swallowing, or of irrigation of the nasal passages, thus evincing a wise provision against the admission of foreign substances into the internal ear. When open, they appear as hollowed excavations. The edges are incurved and smooth. In a case of a lady deaf in the right ear, the right Eustachian orifice presented deeply serrated edges.

The direction of the opening is backwards and inwards. From this circumstance and others, there has been suggested to the writer's mind the propriety of catheterizing the Eustachian tubes through the mouth and behind the velum palati. This process would avoid the pain and unpleasantness of the passage of the catheter through the partially blockaded nares, to say nothing of those cases, not infrequent, where the passages are distended by an abnormal deviation of the vomer and turbinated bones. *The writer has easily and successfully entered a bent probe into his right internal Eustachian orifice by means of the rhinoscope, and seen it there.* The color of the margin is a pale red. The color of the inside, or visible bottom of the orifice, is of an ashy white. The orifices of the Eustachian tubes are evidently of considerable rigidity, and of great patency when compared to the calibre of the meatus externus. The writer has never yet seen any representation of them that was accurate. Their appearance reminds one of that of the external ear, with its helix deprived of its tragus and antitragus.

I have observed no variations in shape while the palate was passive, which appears to be the agent whereby the Eustachian opening is shut or opened, but have frequently, in patients, observed them half and three quarters closed, the closing appearing to depend upon the drawing up of the soft palate, and the opening upon the relaxation of the same—the muscles engaged in this process being the levator palati and tensor palati.

Physiological objective observations show the Eustachian orifices sometimes to appear like a crescentic opening, and sometimes like a mere sulcus parallel to the upper and outer margin of the nasal opening. Sometimes, also, they look like the mouth of a cave dug out of the lateral pharyngeal wall.

[To be concluded.]

## DR. VALERJ'S INTRODUCTORY LECTURE.

(Continued from page 365.)

THE discussion of such difficulties, or the just solution of them, comprehending, as a necessary consequence, both the necessity of medicine and the usefulness of the physician and his remedies, if it requires on my part a clear exposition of the subject, requires on yours the most serious attention.

In order to perceive that nature does not effect the cure of diseases with discernment or intelligence, it is requisite first to bear in mind, that we defined this term as being "an aggregate of forces, which, though special, efficient, and acting according to provident laws for the conservation of our economy, act, nevertheless, of necessity—that is, void of discernment or reflection with regard to the end in view; in other words, they operate fatally, physically, without knowing, or being enabled to avoid or modify the scope for which they were destined by the infinite wisdom of the Creator, namely, the health of the individual. Now the same happens in the state of illness. Nature, the moment our organism enters into the abnormal condition of suffering, displays her salutary activity, but without volition or choice. Indifferent with regard to the consequences of her operations, she is forced to act of necessity, not as a being endowed with will, *compos sui*, but according to those immutable laws which her Author has imposed upon her. Just as a stone thrown into the air invariably falls towards the centre of the earth; just as an acid, when it comes in contact with certain alkalies, is invariably converted into salt, so the *vis medicatrix nature*, invariably and unfailingly, unconscious why or how, effects the process of curing, of restoring health. It hence follows that when we physicians, observing a crisis, which, far from saving a patient, occasions his death, exclaim, *that nature deceives herself*, our declaration in this case should be received in a metaphorical, not positive sense; because error belongs only to him who possesses the faculty of choosing, and the consciousness of what he is transacting, and not to that which acts through physical necessity, ignorant both of cause and effect, and operating according to determined laws and with appointed instruments. Let me give you here some actual proofs of the truth of my assertion. Let us suppose that several persons, in order to pursue their journey, are constrained, in a state of perspiration, to cross a current of cold water, and that the arrested perspiration has been the cause of illness to them all. Nature, ever watchful and operating for their benefit, begets a fever, which on the morrow terminates in the case of one with a profuse diaphoresis; in that of another, far from ceasing, it progresses to a pneumonia; in the case of a third, it results in a violent and acute rheumatism. Now can we interpret these three different maladies, all derived from one identical cause, as an operation of a rational intermediating nature, acting with discernment, with pre-

science of the result, with well-pondered determination? No, certainly; for, if it were so, she would have produced the perspiration in them all by means of the fever, and would have thus equally freed them from their malady by the shortest, safest and least painful process. Suppose, in like manner, that two individuals have swallowed an equal quantity of poison, and that nature, in order to effect their recovery, has immediately brought on a fit of vomiting (the shortest and most efficacious remedy), and suppose, moreover, that one of them it fortunately cured, leaving no other effects from the poison than a sense of burning in the stomach; while the other, notwithstanding the vomiting, is laid up with a painful and mortal gastritis. These and many other examples, which you may multiply at your pleasure, as numbers of them occur daily, evidently prove that nature acts not with intelligence, that she is not free in her operations, and therefore no wonder that various and not invariably salutary must be, and really are, the modes and effects of her action in benefiting our affected organism. Nor, indeed, can it be otherwise; for, taking it as proved and granted that nature is the re-union of the forces inherent in the living organism, as she cannot exist or act without this latter, so she is obliged to operate in as many different modes as are the different physical conditions which this organism may assume. If we apply a motive power to a watch, or to any other mechanical apparatus, as long as the wheels and other parts of the mechanism retain their stated conditions as to form, size, relationship, &c., the motion will be such as was expected; but as soon as one, two, or all these conditions are modified, the motion must necessarily change, and the changes be proportioned to the respective modifications that have taken place; never ceasing, however, to act uniformly (that is, in perfect relationship and harmony) with mechanical laws. Thus it happens with nature in her dealings with our affected organism. Her beneficent action is unceasing, ever guided with admirable order and by admirable laws, but always subordinate to the condition of our frame, as the motions of a watch are to that of its wheels, and the works of an artizan to that of his implements and the substance which he handles. The better to understand one another, let us suppose that a legitimate inflammation has established itself in a sound lung of a robust person; nature will resolve it hastily by that process which pathological anatomy has now well determined. But if, on the other hand, this pneumonitis attacks a lung granulated with tubercles, or congested with chronic bronchitis, or a person of seventy years, feeble and suffering from disease of the heart—nature, even under such circumstances, will proceed in the work of resolving the pulmonary exudation; but, operating on organs, and with an organic frame quite different, the absorption of the exuded matter will be either incomplete or tedious, or arrested by the complications of co-incident alterations; so that, far from being cured, a chronic pneumonitis, or a phthisis, or even death itself, will be the result. Al-

ways bear in mind, however, and I deem it useful to repeat it, that these last-mentioned effects, although they seem different from the former, do not cease to be, like this, not only physically necessary, but even regular, that is to say, comprised within the scale of those laws which regulate the economy in its pathological state.

Let us now proceed to confute the second objection, which consists in considering medicine, and therefore also the physician, as superfluous or hurtful.

And, firstly, I will say that the very experience which teaches us that nature cures a considerable number of diseases without the concurrence of the physician, also daily teaches us that in various cases she remains impotent if not opportunely aided by him. We observe, in fact, as is easily to be conjectured, that her efforts, whether it be on account of the weakness or bad crisis of the organism, or on account of the virulence of the morbose causes, or the gravity of the pathological process, prove insufficient, sometimes excessive, or over-impetuous, and sometimes, too, wrongly directed.

Perhaps it is not possible to establish the exact limits, or mark with precision the circumstances wherein the exclusive power of nature ends, and where it begins to need the aid of art. But it may, nevertheless, be retained as a general maxim (of the truth of which you will shortly be convinced in the very outset of your career), 1st, that nature exercises less activity in chronic maladies than in acute ones; 2dly, that its predominant action, in acute maladies, may either be irregular or too violent, from which arises the necessity of an art capable of aiding, moderating and directing her. And here it will not be out of place to state precisely in what manner this art acts, and ought to act, in order to prove beneficial, and what instruments are to be used therefor. But to proceed aright in such a delicate and important matter we should consider what is meant by disease.

You are all aware of the numerous causes which disturb, convulse, or ruin the human frame. Some of these are congenital with the primordial development of the germs in the very act of its fecundation; others are engendered by the incessant exercise or motion to which all its parts are subject during life; others by the action of a number of agents which surround us, and act upon our organisms not only internally but even in the innermost recesses of our tissues. Cold, heat, light, electricity, air and the different substances it contains, our aliments and their contents, &c. &c., at the same time that they are the necessary and indispensable agents for the maintenance of our physical existence, create, moreover, to a great extent, the forces termed hurtful, or those that beget that state called disease. Now, however numerous may be the definitions that have been given of this state (definitions, all of which derived from a different system have variously and frequently, with deplorable consequences, influenced medical practice), the best, because most conforming to clinical reality, is that of considering disease as an alteration of the organ-

ism, or a *preternatural modification of the body*; a modification or alteration, which necessarily induces a corresponding disorder of its functional condition. What if, in some cases, we fail in discovering the existence of such a modification, or demonstrating in what it consists? Our frame is composed of parts, and of parts with functions; when we find these impaired, we are forced to admit that the instruments that produce them have undergone corresponding damage. The surgical diseases, nay all those termed external, prove this conclusion to be true; we find in each of them that with the functional element the anatomical element is also changed. If we are unable to do this in various cases of internal diseases, it should not be attributed to the want of a pathologic organic process, but to the circumstance that this is not so obvious to our senses as in the external diseases, baffles every attempt at being explored, and, for the most part, operates in the innermost penetralia of our economy. Moreover, if even in the physiological state the minute structure of some tissues, and the crisis of certain humors, are still far from being perfectly known, or from supplying us with a full explanation of the functions derived from them, can we be surprised if, in the pathologic state, many subtle alterations which these solids or fluids undergo should escape our notice?

But to penetrate somewhat deeper into the nature of disease, it is not sufficient to consider it a mere necessary organic alteration conjoined with a functional disorder, and produced by a morbid cause or agent. There is also another element equally indispensable and important, namely, the state of the forces, or the intermediary action of nature. Let a piece of red hot iron, or any other injurious substance, be applied to a person who had died a moment previously. Here you see a hurtful cause, a material alteration; but let it, instead, be applied to a living man: what a difference do we not behold in the appearance and quality of the lesion inflicted! What a diversity in the process which ensues! Now this difference, this diversity consists entirely in the presence and reaction of the *ensemble of forces* which we call nature, and whose existence lasts as long as life itself. In fact, whatever be the morbid causes, and the pathologic modifications which result therefrom, experience teaches us that nature instantaneously reacts on them, effecting with that order, and according to those laws and method, of which we already treated, the elimination of the morbose matter, the reparation of the damages inflicted, the recovery in fine of health, of which she is necessarily the protectrix. This stated, and wishing it to be understood that we include all morbid causes in general, we shall say that by an attentive observation of them, we are taught that nature, in this solemn and beneficial task, if at one time she succeeds completely by herself, at another fails, if we do not skilfully minister to her convenient aid. But what are these aids, with what end in view are they given or prescribed? Are they more efficient than nature herself? That is,

with regard to the cure, do they claim a principal part, a part superior to that of nature, or otherwise? This is what remains for us to determine in order to obtain the object of our lecture.

[To be continued.]

---

### Reports of Medical Societies.

---

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY CHARLES D. HOMANS, M.D., SECRETARY.

SEPT. 24th.—*Fatal Case of Chorea following Criminal Abortion.*—Reported by Dr. WHEELER.

The patient was a healthy Englishwoman, about 33 years of age. She had aborted five days previous in consequence of a puncture of the membranes by some unknown person. She was then at the end of the third month of her third pregnancy. On the first visit, the patient was up and about the house as usual. She complained of nothing but an irregular and incessant motion of the arm, forearm and hand of the right side; soon the facial expression became disordered. The mind was clear. She seemed cheerful and inclined to laugh at the grotesque movements. She had no fever, no pain in the abdomen or tenderness of the uterus or its appendages. In a few days the whole excito-motory system became involved; the bodily contortions were violent; every voluntary muscle of the body seemed at times to join in the discordant dance. It was difficult to restrain the jactitations so as to confine the patient to her bed or keep clothes upon the body; the only quiet or sleep obtained was from the effects of chloroform or ether (the former seemed to work the best).

*Treatment.*—Cups, counter-irritants, with revulsive effects, heat and cold to the cervical region of the spine; internally—cathartics, nervines, opiates and narcotics: but all to no purpose. The patient died from exhaustion on the twentieth day from the time she aborted. In this case the puncture, or the immediate effects, must have done violence to one or more of the hidden links in the mysterious chain of the excito-motory element of the nervous system.

The fact of abortion was concealed from me; and I believe in this respect the case is typical of many which the family physician is called to take care of after the professed abortionist has preceded him and done the mischief.

OCT. 8th.—*Fracture of the Head of the Radius.*—Dr. HODGES showed the specimen.

A man fell sixty feet, injuring himself fatally, and died at the Massachusetts General Hospital, six hours after the accident. Among his injuries was one of the elbow, unattended by much swelling, and affording unusual facilities for careful examination. The essential features of the fracture were correctly diagnosed by the surgeons who saw the case, but the *post-mortem* dissection revealed a longitudinal fracture without displacement, through the head of the radius, which was not detected during life by any one present. The rarity of this particular fracture, and indeed of any affecting the head or neck



of the radius, is conceded by all authors. The specimen shown presented a clear and regular split, involving very nearly one half the head of the radius, cleaving outwards so as to extend no further than the neck of the bone. It was accompanied by a very oblique fracture of the shaft of the ulna, commencing at the depression of the articular surface marking the separation of the coronoid process and the olecranon, extending almost longitudinally three and a quarter inches downwards, and detaching from the shaft that portion of the bone to which the olecranon was attached.

Dr. Hodges remarked that there were but very few instances of longitudinal fracture of the head of the radius recorded in the books. It was curious that, out of those cases he had found, three were associated with the rare accident of fracture of the coronoid process of the ulna, and an inspection of the present specimen would show that this also might have been a fracture of the coronoid process, had the longitudinal split which passed down the shaft of the ulna terminated anteriorly (towards which aspect it inclined and came nearest), instead of posteriorly.

OCTOBER 8th.—*Re-amputation; Hemorrhagic diathesis; Death.*—Dr. HODGES reported the case.

A single man, thirty years old, a shoe-maker by trade, received the kick of a horse, which resulted in a large, obstinate and bleeding ulcer of the shin, defying all attempts at cicatrization. The limb was consequently amputated below the knee, one year ago, by a distinguished New Hampshire surgeon. This gentleman states that at the operation the hæmorrhage from the end of the tibia was so profuse as to threaten life, and therefore the limb was immediately disarticulated at the knee-joint. The union of the flaps was by granulation, and they have never cicatrized, but presented, at the time of the patient's entrance to the Massachusetts General Hospital, a hæmorrhagic ulceration, which, though occasionally contracting to a small surface, speedily reverted to its usual dimensions. The patient reported that for several years he had at times had hæmorrhages difficult to control, and that he habitually slept with cotton-wool in his nostrils to guard against epistaxis. His general health, appetite, strength and digestion were said to be good. Re-amputation was performed just above the condyles, without any loss of blood during the operation. Oozing from the bone and a slight degree of capillary hæmorrhage, not exceeding what usually accompany amputations, were controlled by compression, so that the next morning the bandages, which had been kept wet with cold water, were simply stained, and the flaps, which were left open, were only partially filled with coagula. His general condition on the day following the operation was, however, a very unfavorable one, and ecchymoses from hæmorrhagic effusion were visible in the subcutaneous cellular tissue at the upper part of the thigh. His pulse was small and thready, and there had been repeated vomiting. He gradually sank, and died about twenty-four hours after the amputation. No autopsy was permitted.

One of the interesting points in the specimen (the end of the femur) shown, was the condition of the cartilages, which was unchanged; remaining smooth and unabsorbed, although the flaps had united to them by slight and easily ruptured adhesions.

OCT. 8th.—*Gun-shot Wounds of the Knee-joint and of the Pelvis.*—Dr. HODGES showed the specimens.

They were from a patient who was assaulted and shot in several places.

A bullet entered the tuberosity of the right tibia one inch below the articulation, and emerging on the opposite side close to the articulation, had fractured the bone into the joint, splitting the cartilages in various directions. Amputation of the thigh was performed at the Massachusetts General Hospital, eighteen days after the injury.

Another bullet, entering the right tuberosity of the ischium, fissuring it longitudinally and tearing up the internal surface of the bone at its point of emergence, traversed the pelvic cavity and impinged against the pubes on the left side of the symphysis, fracturing but not penetrating the bone, and then fell loose into the pelvis. No nerve or vessel of magnitude was injured, nor were the peritoneum or bladder wounded. The peritoneum was dissected up and separated from the pubic bones and the lower part of the abdominal parietes by an accumulation of pus, which, partly evacuating itself by the track of the bullet's entrance, had been still further vented by an opening into the abscess made through the abdominal walls and outside of the peritoneum, in the vicinity of the right inguinal ring, and through which the loose bullet had been extracted. The entire cellular tissue of the pelvis was infiltrated with pus, and of this cellulitis and the exhaustion incident to the gravity of his injuries, the patient died, twenty-two days after being wounded.

Nov. 12th.—*Hæmatemesis of long standing; Probable Gastric Ulcer; Recovery.* Dr. MORLAND reported the case.

The patient, an Irish servant girl, twenty years old, stout and well made, with no traceable hereditary tendencies, was admitted into the City Hospital, March 28, 1866. She had always had excellent health, until about ten months since, when, as she stated, while "fooling" with a young man, she was kicked by him, "in the stomach." It was ascertained that she had been put at very hard work, and had fared badly both as to food and general treatment. There was no evidence of her having been unchaste. Shortly after having received the kick, she had hæmatemesis, which has since frequently recurred, until, on admission into the Hospital, she was found to be excessively weak, and, for some time previous, had not been able to work, nor even to sit up. There had also been a sensation as of pressure upon the epigastrium. Three days before her entrance into the Hospital, she had very copious hæmatemesis reported as amounting to two quarts. No reliance, of course, could be placed upon this estimate.

*Condition on Admission.*—In bed; drowsy, but easily aroused by questions; offensive exhalation from skin; pulse 92, rather weak; respirations, 48; mouth dry; complains of much thirst; tongue white on lobes, red at tip; some white sordes on teeth; skin hot and dry; bowels constipated; no defecation for four days, although laxative medicine has been taken. Abdomen tender, tympanitic; no rose spots; epigastrium still more sensitive to the touch, from which patient shrinks, with evidently real and acute pain. Much pain in chest on long inspiration; this was somewhat relieved by a sinapism applied last night. Great anorexia exists; has eaten nothing since the 24th

inst. until last night, when she took some gruel, and retained it well. Catamenia regular, natural. Urine free, high-colored.

An enema, containing three ounces of the compound infusion of senna, was directed, and flaxseed-tea, iced and flavored with lemon juice, given for a drink. A drachm of the officinal solution of sulphate of morphia, at bed-time, was ordered—to be repeated in two hours, if no sleep.

29th.—Tongue, pulse and respiration same as yesterday; countenance flushed; has an anxious expression and knitted brow; circulation deficient. Pain in chest the same. Apply flaxseed poultice to seat of pain. Wine whey to drink during the day. Cold applications to head. Sponge arms and chest with spirit and water.

30th.—Pulse 80, sharp; hæmatemesis this morning, about an ounce in quantity; pain continues in chest. Opiated poultices were applied, and ice given freely, to swallow. Drinks as before, and cold sponging. If the vomiting of blood recurs, aromatic sulphuric acid to be administered, twelve drops, in half an ounce of water, three or four times in the day, or *pro re nata*.

31st.—The visit was made to-day by Dr. UPHAM, and the record is: Pulse 104, weak, irregular, wiry:—R. Aquæ Camphoræ, ℥ij.; Liquoris Morphiæ Sulphatis, ℥ij.; M.; ℥ss. every 2 hours. Hot mustard pediluvium.

April 1st.—Pulse 72, more soft and regular; respirations, 32. The bowels to be opened by enemata; chloroform, on spongio-pilin, to be applied to the seat of thoracic pain.

On the few following days there seemed slight improvement, although pain and "soreness of the chest" were still complained of. The pulse and respirations continued nearly the same as at the last record. She took pounded ice and sherry wine, and also broth.

4th.—The thoracic pain persisting, four leeches were applied over epigastric region. Ice and brandy to swallow. Hæmatemesis reported, following vomiting of food.

5th.—Tongue much cleaner. Reports herself "better." Pain less. No action of bowels for three days; headache. Pulse 68, small in volume; respirations, 32. Opiated fomentations; hot pediluvia; castor oil, ℥j.; lemon juice, ℥ss., statim sumend. On the 7th, the brandy was stopped, and iced milk, as diet, ordered, in small quantities, every two hours. Also arrow-root, occasionally. Hæmatemesis was again reported on the 8th and 9th, and there was pain described as *radiating* from the epigastrium, most marked towards the left side. This peculiarity of the pain, which was frequently noticed subsequently, suggested, at one time, the suspicion of malignant disease,\* which, as is well known, has followed severe blows even in young and vigorous persons. The writer, some years since, reported a case of this nature to the Society, in which cancerous disease of the foot, in a child, followed a violent kick. A blister was applied to the seat of pain and kept open for some days. At several subsequent times blisters were applied, apparently with some benefit. On the 15th, hæmatemesis still continuing, one quarter of a grain of the sulphate of copper, in pill, was directed, to be taken twice in 24 hours. Diet strictly farina-

\* "The pain (in gastric cancer) is, as a rule, more continued (than in gastric ulcer), much less influenced by the taking of food, and more radiating, being often referred to the right or left hypochondrium."—*Da Costa on Medical Diagnosis*, page 379.

ceous. Iced drinks. It being found that even custard, tapioca, &c., disagreed, the patient was put upon milk and lime-water as the sole diet—two ounces of the latter to six of the former. The proportion of lime-water was subsequently reduced one half, and more, on account of its being unpalatable to the patient.

On the 21st some gruel and arrow-root were allowed, but the moment anything of a more solid nature was permitted, hæmatemesis would occur. This was especially noticeable twice, when, at the urgent solicitation of the patient, some finely cut mutton chop and some milk-toast of baker's bread were allowed. The symptoms, thus provoked, subsided on resuming the milk and lime-water regimen. The pain, extreme prostration and nausea, consequent on any infringement, soon made the patient entirely reconciled to the restriction. The attacks became less frequent and severe, the dietary rules being strictly enforced. On the 14th of May, epistaxis took place, and was repeated on several mornings. There was also pain in the stomach and right shoulder. This yielded to anodyne applications, hypodermic injections, &c. On the 23d and 24th, blood was passed, quite freely, per anum, and pain was complained of over lower part of sternum. The pills of sulphate of copper, which had been discontinued for some days, were resumed, and a blister was applied to the seat of pain, with entire relief. No hæmatemesis was noted after the occurrence of the epistaxis, although the gastric uneasiness persisted for some time, and, as stated, blood was discharged from the bowels. With the exception of troublesome constipation, nothing was noticeable through the month of June, during which she was steadily convalescing, and began to eat, with impunity, broths, rare and finely-chopped meat, with farinaceous articles. She was put upon the tincture of the chloride of iron during the last week of her stay, and was told to continue it, for a time, when discharged. She left the Hospital, "well," on the 28th of June, and went to service. She might have been safely discharged a week or ten days sooner, but, being homeless, was allowed to remain until a situation was found for her.

---

### Bibliographical Notices.

---

*Clinical Notes on Uterine Surgery. With special reference to the Management of the Sterile Condition.* By J. MARION SIMS, A.B., M.D., late Surgeon to the Woman's Hospital, New York; Fellow of the New York Academy of Medicine, of the New York Pathological Society, &c. &c. &c., and Knight of the Légion d'Honneur. 8vo. Pp. 401. New York: William Wood & Co. 1866.

We have too long deferred a notice of the remarkable book of Dr. Sims, but we are unwilling that it should pass without due recognition of its merits, tardy though it be. For originality, sound, practical views of uterine diseases and their treatment, great ingenuity in the devices suggested to meet special circumstances, and absorbing interest in its narrative of cases, it has rarely been equalled. The book is what it professes to be, a record of the practice of the author. It bears on every page the stamp of the master mind from which it came. The introductory chapter, on the Method of Uterine Examination, at

once impresses the reader with the striking traits of the author, ingenuity of contrivance, vigor and decision of purpose, with the most complete thoroughness. It is very evident that if the hidden mysteries of the uterine system are by any method to be brought within the reach of ocular examination, Dr. Sims's methods are just those to accomplish it.

The principal subjects treated of in this work are Conception, Menstruation and its various derangements, some of the diseases of the os uteri, mal-positions of the uterus, and the various causes mechanical and physiological, or rather pathological, of Sterility. All of these subjects are handled in the practical manner so strikingly characteristic of the book. It is in his treatment of Sterility that Dr. Sims has been led to make those experiments which have so extensively drawn upon him the animadversion or the ridicule of the medical press. We must confess we do not sympathize with either of these expressions of feeling. It should not be forgotten that child-bearing is in very many instances, or at least it *ought* to be, an essential condition to domestic happiness. In Europe it is of immense importance often in its influence upon the tenure of large estates, and hardly a stronger motive could be furnished to an active mind to exert all its powers of invention, to remove the obstacle which stands in the way of the successful exercise of so important a function. Dr. Sims has felt this, and has gone as far, it would seem, as man can go, to accomplish the desired end. It is an easy thing to see in his experiments subjects for satire or indignant disgust, if one is willing to overlook the end which he had in view. He was willing to put himself in a position as an experimenter, so far as we know entirely unprecedented, and which it is not difficult to regard as humiliating, and he has had the frankness to publish his experiments in the spirit in which they were originally designed; and we think he has hardly been dealt with fairly by his critics. For our part we feel that he has thus contributed very valuable additions to our physiological knowledge.

The book is printed in clear type and is copiously illustrated with wood-cuts, which are unusually expressive of the author's meaning. As a whole we regard it as one of the most valuable contributions to Uterine Surgery since the modern enlargement of this important field of practice.

---

*A Practical Treatise on Fractures and Dislocations.* By FRANK HASTINGS HAMILTON, A.B., A.M., M.D., Professor of the Principles of Surgery, Military Surgery and Hygiene, and of Fractures and Dislocations in Bellevue Hospital Medical College, &c. &c. &c. Third Edition, Revised and Improved. Illustrated with two hundred and ninety-four wood-cuts. Philadelphia: Carey and Lea. 1866.

DR. HAMILTON'S Treatise still holds its place without a rival as the very best on the important subjects of which it treats. It has now reached its third edition in the seventh year of its existence, evidence enough of its general appreciation by the medical profession. On a former occasion we spoke quite fully of the merits of this important work, and we need therefore only say now, that the present edition is an improvement on the first two. It contains, in addition to the matter which they contained, the results of the author's careful study of

recorded cases and observations since they were published, and a considerable number of new observations by the author in his private practice, and from "the ample fields of instruction in Bellevue and Charity Hospitals, New York." The author has also introduced from Gray's Anatomy a number of illustrations showing the centres of ossification and the subsequent development of bones, with the view to clear up the confusion which too often prevails even among surgical authors, between separations of the epiphyses and fractures. The chapter on Gunshot Injuries has been somewhat enlarged by the introduction of statistics from the records of the contending armies during the war of the rebellion, and a few wood-cuts have also been added. The present edition is well printed, and the wood-cuts, although not in the highest style of art, are in the main sufficiently good, making the author's meaning evident enough; it well sustains the reputation which the previous editions have earned.

---

## THE BOSTON MEDICAL AND SURGICAL JOURNAL.

---

BOSTON: THURSDAY, DECEMBER 6, 1866.

---

### THE PAST AND PRESENT SCHOOL OF PARIS.

THERE was a time when the French capital was looked upon by the medical profession throughout the world as the one and only seat of science, where alone the grand truths of our art could be discovered and taught. Students from every country went thither to complete their studies and to see the men whose names had been upon the lips of their teachers all through their early instruction at home as demigods in science, and whose opinions they had been taught to receive unchallenged as fixed principles. Even the hospitals which were associated with their teachings became famous, and Hôtel Dieu, La Pitié, La Charité, du Midi, St. Louis, were as familiar and classic names to the student of medicine everywhere, as the Parthenon and Forum had been during school and college days. The distinguished men who composed the Faculty were then at the height of their fame, and formed a body whose brilliant reputation was fully deserved and has never been equalled. Paris had then no rival as a school of medicine; she was the acknowledged front and centre of science. This was only a quarter of a century or less ago; but what position does she hold now? The earnest students of other countries no longer visit her exclusively, or even first or second, to complete their general studies, or to perfect themselves in any special branch of our art, nor is French now the universal or most important language of science, as it once was. The very names which then commanded such world-wide respect are now almost memories associated with the past, and are no more the representatives of the medicine of to-day.

What is the cause of this decadence? Why is it that the Wiener Schule holds at this moment the place then occupied by the Ecole de Médecine? The great masters in Paris have not died out and left their places to be filled by smaller men in Vienna, for with one or two ex-

ceptions the roll of French professors bears the same distinguished names that it did twenty-five years ago. Other causes have wrought the change. Gradually the philosophic German mind, so sceptical and irreverent as to accept no dogmas unchallenged, and so patient and industrious in following the suggestions of nature to their very source, began to make itself heard. This influence, at first felt in small things and expressed in special directions, soon became an acknowledged power as the careful observations of devoted students, men who cared for nothing else in life than their studies, who had no higher ambition than their scientific reputation, who knew no other pleasure than was to be found in the laboratory or hospital, and who never aspired to become rich, became known. Such men as these were called together, as their names and works attracted attention, and formed the Vienna School, a body of special students, in no way men of brilliant genius, but keen observers and accomplished teachers. It is this devotion to study in special directions as the prime object of their lives, science before wealth, which has made German medicine what it is. It has given us Rokitansky, Virchow and Förster in pathology; Wunderlich, Oppolzer, Skoda and Frerichs in medicine; Hyrtl in anatomy; Brücke and Ludwig in physiology; Jäger, Graefe, Donders and Arlt, Hebra, Sigmund, Zeissl and Scanzoni in special departments; Liebig, Lehmann, Scherer in analytical chemistry, and many other distinguished instructors who might be mentioned; it has made a knowledge of the German language a necessity to all who would know anything of the modern advances in science, and draws our students to Vienna and Berlin as the great schools of medicine.

In the mean time Paris has been living chiefly on the reputation of her past greatness, and the slight progress she has made has seemed complete stagnation by the side of the vast advance of her indefatigable Saxon neighbors. She is at last awaking to the fact that her present state is not equal to her former splendor, and is taking steps to recover her lost position in the scientific world. As will be seen by the changes announced in her faculty below, she is beginning her reformation in earnest. It is workers she wants, not great names, and if she can secure the former, she may in time make herself again a leader in medicine.

#### MEDICAL INTELLIGENCE.

• We announced in a recent number the resignation of MM. Trousseau and Cazenave, of the Faculty of Medicine of Paris. The *Union Medicale* says that there has been no resignation, properly so-called, of any member of the Faculty, but several of them have requested that they may be put on the retired list. In addition to those mentioned above, the *Union* gives the names of Professors Andral, Piorry and Cruveilhier. To these is to be added the name of M. Jobert (de Lamballe), who is said to be hopelessly insane. With regard to this movement the *Union* remarks, that some of these distinguished members of the Faculty have made the request of their own accord, *proprio motu*, and others have been *invited* to make it—adding, it is unnecessary to specify further.

By a decree of the 3d of the last month, MM. Andral, Cruveilhier, Piorry, Trousseau and Jobert were placed on the retired list, a position which has a pension attached to it.



By a decree of the same date, M. Piorry was appointed an officer of the Imperial Order of the Legion of Honor, and MM. Andral, Cruveilhier and Trousseau were appointed honorary professors.

*Professor Trousseau's Reason for retiring from his Professorship.*—In an editorial in the *Union*, by M. Amédée Latour, we find the following singular explanation of his retirement by M. Trousseau:—

"When, nearly thirty years ago, I was chosen professor," said Trousseau, "Orfila had been my judge, and I went to see him. 'Will you,' he said to me, 'have the courage to do that which I have decided to do? I am one of the most popular professors of the Faculty; I shall probably be so for a long time yet. Very well, at sixty-five years, without waiting for the public to leave me, I shall withdraw.' 'I engage to do the same,' I answered him, 'and you may depend upon it I shall not occupy my chair until I am worn out.' I have kept my word. I was sixty-five years old on the 14th of October, and I ask to be allowed to retire. The young should take our places; and if each one of us were to act in like manner our Faculty, although deprived of the grand institution of the *concours*, would revive its ancient splendor. The labor of consultation is heavy for the shoulders after sixty, the labor of a professorship is impossible." Thus it is to keep a promise made to a dead man, who could no longer remind him of it, and who himself did not keep his (for Orfila was still in his chair at sixty-seven years, of which no one, to be sure, complained), that M. Trousseau abandons his.

*French Justice.*—Under the title of Lorraine Jurisprudence the *Union Médicale* gives the singular result of a suit by a physician for the recovery of professional fees properly due him. The patient said, "I called in the physician but once; I owe him then for only one visit; if he came often, it is because he wished to do so. He cured me, it is true, of a very grave disease which prevailed in my village as an epidemic; on many occasions he cauterized my throat, to stop a mortal disease—all this is very true; but I did not ask him to do it, and I won't pay him except for the first visit." The unfortunate doctor lost his case, and in addition had to pay the costs of Court.

On another occasion the judge required the physician to prove by witnesses that he had been frequently called to his patient; and on his refusing to produce such evidence, the case was decided against him, without any evidence from competent persons as to the fairness of his charge being admitted.

*Confirmation of M. Villemin's Experiments of the Inoculation of Tubercle.*—Dr. LEBERT, Professor at Breslau, has been trying the experiment of introducing tubercle into the system by subcutaneous injection. The amount introduced varied from 50 centigrammes to a gramme, diluted and triturated with distilled water. The nape of the neck was the spot chosen for injection. The experiments were made with Guinea pigs and rabbits, and both grey and yellow tuberculous matter were employed, as well as liquid from a cavity. The result of his experiments was the finding of tubercles not only in the lungs, but in the liver, the spleen, the pleuræ, the pericardium, and the whole lymphatic system. Microscopic examination demonstrates the identity of these tubercles with those of man.

*Death of Dr. Daniel Brainard.*—Our citizens will learn with profound sorrow that Dr. Daniel Brainard, President of Rush Medical College, died at the Sherman House last evening, at a quarter past nine o'clock, of cholera. He was in good health as usual at six o'clock on Tuesday evening, and had, singularly enough, during the afternoon, read a lecture relating to the disease with which he was soon afterwards attacked.

Dr. Brainard had long held a recognized position among the most eminent surgeons of this country, and enjoyed a reputation abroad such as but very few in his conceded department have attained. His death will cause an irreparable loss to the profession, and to the institution of which he was the head, and will long be felt as a public bereavement by the city with whose founding and growth his life has been so closely identified.

Dr. Brainard had but recently returned from an European tour, and his family are now in Paris. During his illness he was attended by the Faculty of the Rush College.

A meeting of the Medical Profession will be held at the Common Council Chamber this afternoon at four o'clock, to take appropriate notice of the event.—*Chicago Republican*, Oct. 11th.

*Connecticut Insane Hospital.*—This new hospital is to be built on an eminence overlooking the Connecticut River, a mile and a half south-east of the city of Middletown. The building is to front on the Connecticut, and the grounds border on the river for three fourths of a mile. There are three streams of water flowing through them, upon one of which is a good water-privilege.

#### VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, DECEMBER 1st, 1866.

##### DEATHS.

	Males.	Females.	Total.
Deaths during the week	42	47	89
Ave. mortality of corresponding weeks for ten years, 1855—1865	37.9	41.2	79.1
Average corrected to increased population	00	00	85.77
Death of persons above 90	0	1	1

NOTICE.—Subscribers who have not paid their subscriptions for the current year, will find their bills enclosed in the present or a succeeding number of the JOURNAL, and an early attention to them will confer a favor on the publishers. The present facilities for forwarding payments, by money orders or otherwise through the mail, render it inexpedient to send out collectors as formerly, and subscribers need not therefore wait to be called on in this manner. The receipts for money received by mail at the Journal office will be enclosed in the next number of the JOURNAL after receiving it. Subscribers who do not thus receive a receipted bill after payment, will please at once notify the publishers.

DEATHS IN BOSTON for the week ending Saturday noon, Dec. 1st, 89. Males, 42—Females, 47. Accident, 2—apoplexy, 1—congestion of the brain, 2—disease of the brain, 4—bronchitis, 5—cancer, 1—cholera morbus, 1—consumption, 16—convulsions, 1—croup, 2—cystitis, 1—diarrhoea, 1—diphtheria, 2—dropsy of the brain, 2—epilepsy, 1—scarlet fever, 3—gastritis, 2—disease of the heart, 2—malformation of the heart, 2—insanity, 1—intemperance, 1—disease of the kidneys, 1—congestion of the lungs, 2—inflammation of the lungs, 11—measles, 1—old age, 4—paralysis, 1—peritonitis, 2—premature birth, 1—puerperal disease, 4—smallpox, 1—syphilis, 1—unknown, 5—whooping cough, 2.

Under 5 years of age, 33—between 5 and 20 years, 7—between 20 and 40 years, 22—between 40 and 60 years, 12—above 60 years, 15. Born in the United States, 60—Ireland, 21—other places, 8.